

2014-2016 Louisiana Sea Grant Strategic Plan Priorities

(Please refer to a specific strategy by the number preceding same, e.g. 1.1)

NOTE: Although all of the strategies below are important to both Louisiana and Louisiana Sea Grant, strategies in *blue italics* have been identified as “Priority Strategies” for the 2014-2016 funding cycle. Proposals related to the subjects addressed in these “Priority Strategies” are particularly encouraged and will receive the highest consideration during the evaluation process.

Focus Area: HEALTHY COASTAL ECOSYSTEMS AND HABITATS

1. Goal: Generate, synthesize and communicate credible information from the physical, environmental and social sciences to support ecosystem-based approaches to managing and restoring Louisiana’s coastal environment including fish, wildlife, and plants

Strategies

- 1.1 *Establish benchmark costs and benefits of coastal marsh restoration and protection projects, including impacts on the economies, residents, and cultures of coastal communities.*
- 1.2 *Improve Louisiana’s wetlands with river diversion and sediment conveyance projects that optimally manage and allocate sediments, minimally impact local residents, native flora and fauna, and positively affect community, culture, and water quality.*
- 1.3 Predict, detect, monitor, and mitigate harmful algal blooms with both existing and newly developed methodologies and technologies.

2. Goal: Utilize integrated ecosystem-based approaches to sustainably manage land, water, and living resources in Louisiana’s coastal areas

Strategies

- 2.1 *Reduce negative effects of climate change and development on the Louisiana coast with predictive models developed, refined, and applied in partnership with NOAA entities such as National Weather Service and Coastal Services Center.*
- 2.2 *Model and communicate impacts of coastal restoration projects on residents and economies considering both the potential social and economic implications of the projects themselves and the desirable social and economic alternatives of such projects, including ecosystem service value.*
- 2.3 *Educate Louisiana residents and community leaders about both their relationship with the marine and coastal environments and the critical need for conservation and restoration of same.*
- 2.4 *Engage and empower Louisiana residents, community leaders, and policy makers in processes to gather and consider their perspectives of coastal environmental, social, and cultural issues both to encourage private sector/government partnerships and to use the information in decision making.*

3. Goal: Protect, enhance, or restore function and productivity of Louisiana’s degraded ecosystems and habitats

Strategies

- 3.1 *Restore damaged and lost wetlands to the functional equivalent of natural ecosystems based on realistic ecological metrics, hydrologic requirements, and design criteria.*

Focus Area: RESILIENT COMMUNITIES AND ECONOMIES

4. Goal: Promote vibrant and resilient Louisiana coastal economies that include working waterfronts, an abundance of recreation and tourism opportunities, and coastal access for all citizens

Strategies

- 4.1 *Support social and economic analyses of coastal communities that identify and communicate employment alternatives, such as either transitioning to local employment opportunities, applying traditional skill and knowledge to the aquaculture of finfish and shellfish, or ecotourism.*
- 4.2 *Engage, educate, and empower residents of Louisiana's coastal communities in processes that identify and pursue sustainable economic development and community sustainability alternatives, policies and programs.*

5. Goal: Louisiana coastal communities that use comprehensive planning efforts both to ensure efficient use of land, energy, and water resources and to protect the resources needed to sustain coastal ecosystems and quality of life

Strategies

- 5.1 *Invest the citizens and businesses of coastal communities in responsible water, land, energy, resource, and waste management policies and practices through the development and delivery of relevant educational and media appropriate materials and programs.*

6. Goal: Improvements in coastal water resources to sustain human health and ecosystem services

Strategies

- 6.1 *Investigate the existing water policies of both state and local jurisdictions whose water management practices affect coastal resources to understand alternative water policies that might be beneficial for application in Louisiana and the wider Gulf region.*
- 6.2 *Develop and enact model water policies that will assist Louisiana in addressing the growing demands on its water resources from various sectors, including domestic, coastal restoration, fisheries, energy, and interstate transfers.*
- 6.3 *Educate stakeholders and decision makers on water policy issues with outreach information and materials developed by Sea Grant.*

7. Goal: Improve adaptation strategies of Louisiana coastal citizens, community leaders, and industries to complex interrelationships among social, economic and environmental values in coastal areas and reduce risks from hazards and climate change

Strategies

- 7.1 *Design and implement outreach programs on sustainable use of coastal resources for coastal community residents, community leaders, and industry.*
- 7.2 *Investigate and communicate interactions among sea level rise, subsidence, and storm surge, including implications for saltwater intrusion, coastal flooding, agriculture, human health and safety, and cultural changes.*
- 7.3 *Develop and communicate models of successfully resilient communities, including contributions of community demographics, economic base, insurance coverage, building codes, education programs, health care resources, fishery infrastructure, and development.*
- 7.4 *Facilitate implementation of improved land use planning and building codes in Louisiana coastal communities by developing and distributing best practices information.*
- 7.5 *Understand, predict, and communicate impacts of both natural features, including wetlands and upland vegetation, coastal/nearshore morphology, beach dunes, and barrier islands, and man-made structures in providing defense against tropical storms, storm surges, and technological disasters.*

Focus Area: SUSTAINABLE FISHERIES AND AQUACULTURE

8. Goal: Secure a safe and sustainable supply of Louisiana seafood to meet public demand

Strategies

- 8.1 *Restore important native recreational and commercial finfish and shellfish populations by identifying and protecting habitats essential to their reproduction, feeding, habitation, and growth to marketable size.*
- 8.2 *Develop practices, technologies, and systems designed for enhanced, more efficient operation of seafood culture facilities with minimal impact on coastal and oceanic environments and habitats, on natural fisheries, and on the people who depend on natural fisheries.*
- 8.3 *Develop new management, harvesting, handling, and processing technologies, value-added products, innovative waste management practices, and byproduct uses that maximize the quality, safety, and utilization of Louisiana's seafood products*
- 8.4 *Promote seafood harvesting and marketing strategies that both maximize efficiency and profitability and minimize environmental impacts.*

9. Goal: Inform consumers about the health benefits of seafood consumption and how to evaluate the safety and sustainability of the seafood they buy

Strategies

- 9.1 *Educate consumers of the nutritional benefits of Louisiana seafood products and how to judge seafood safety and quality.*
- 9.2 *Develop new harvesting, handling, and processing technologies that maximize the quality and safety of Louisiana's seafood products.*

Focus Area: EDUCATION AND WORKFORCE DEVELOPMENT

10. Goal: Develop an environmentally literate public supported by a continuum of lifelong formal and informal engagement opportunities

Strategies

- 10.1 Advance Louisiana's coastal and Gulf literacy through formal and informal learning opportunities for students, education professionals, and the public in our schools, museums, aquariums, and through other educational forums such as public events, online digital library collections, and the National Sea Grant Library.
- 10.2 Collaborate within NOAA and with other local and regional partners to build public awareness about critical coastal and Gulf issues using the integrated research, extension, education, and communication capacities of the entire Sea Grant network.

11. Goal: Develop a future workforce reflecting the diversity of the nation, skilled in science, technology, engineering, mathematics and other disciplines critical to Sea Grant's mission and national needs

Strategies

- 11.1 *Advance environmental stewardship through teaching, professional development, and inclusion of age-appropriate marine and coastal subject matter while addressing Louisiana's K-12 science, mathematics, and social studies education standards.*
- 11.2 *Use Louisiana Sea Grant's strong university partnerships both to create new research and education opportunities in marine and aquatic science for undergraduate and graduate students and to develop information products and training opportunities that will help build the workforce capacity for coastal-related jobs and professions.*